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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/056,121

01/23/2002

Stephen T. Wellinghoff

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02/01/2006

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EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/056,121	<b>Applicant(s)</b> WELLINGHOFF ET AL.	
	<b>Examiner</b> Taylor Victor Oh	<b>Art Unit</b> 1625	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 15 December 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☒ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see pages 2-8. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

It is noted that applicants have filed an Amendment after the Final Rejection on 12/15/05; applicants' attorney has addressed the issues of record. The proposed amendment will not be entered because it raises a new issue that would require further consideration ; and , it is not in a condition for allowance.

**The Status of Claims**

Claims 174-228 are pending.

Claims 174-191, 194-223, and 226-228 have been rejected.

Claims 192-193, 224, and 225 have been objected.

Claims 1-173 have been canceled.

**Claim Objections**

The objection of claims 174, 184, 185, 194-199, 206, and 226-227 can be overcome by the proposed modification made in the claims. However, claims 201-203, 207-208, and 228 will be still objected even with the proposed claims because they are all dependent on the canceled claims.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 1625

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The rejection of Claim 176 and its dependent claims under 35 U.S.C. 112, first paragraph, can be overcome by the proposed cancellation of the claim.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of Claims 174, 186, 199, 208-209 and their dependent claims under 35 U.S.C. 112, second paragraph, can be overcome by the proposed cancellation of claim 174, the proposed modification of 186, 208-209. However, there is some issue in the new claim 199.

In claim 199, the phrase “Y comprise amino group” is still recited. This is vague and indefinite because the term “comprise” is an open language without a limit in the claim; the compound claims are specific within the boundary; these expressions do not exclude the presence of components in the compounds than the ones recited. Exparte Muench, 79 USPQ 92 (PTO BD. APP. 1948) and Swain V. Crittendon, 332 F 2d 820, 141 USPQ 811 (C.C.P.A 1964). Therefore, an appropriate correction is required.

**Claim Rejections - 35 USC § 102**

Art Unit: 1625

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. The rejection of Claims 174, and 175 under 35 U.S.C. 102(b) as being anticipated clearly by Kim et al ( European Polym. J. vol. 31, no. 6, p. 505-512, 1995) has been maintained with the reasons of record on 6/7/05.

2. The rejection of Claims 174, and 175 under 35 U.S.C. 102(b) as being anticipated clearly by Aharoni ( Macromolecules (1987), 20 (40, p. 877-884) has been maintained with the reasons of record on 6/7/05.

3. The rejection of Claims 174, 209, 213, 217, and 219 under 35 U.S.C. 102(b) as being anticipated clearly by Meyer et al ( GB 2330139) has been maintained with the reasons of record on 6/7/05.

4. The rejection of Claims 174, 209, 213, 217, and 219 under 35 U.S.C. 102(b) as being anticipated clearly by Wellinghoff (WO 98/13008) has been maintained with the reasons of record on 6/7/05.

5. The rejection of Claims 174, 209, 213, 217, and 219 under 35 U.S.C. 102(b) as being anticipated clearly by Wellinghoff et al (J. Den. Res. 1997, p. 279 (abstract 2127), vol. 76) has been maintained with the reasons of record on 6/7/05.

6. The rejection of Claims 174, 209, 213, 217, and 219 under 35 U.S.C. 102(a) as being anticipated clearly by Norling et al (American association for Dental Research meeting, April 2000) has been maintained with the reasons of record on 6/7/05.

7. The rejection of Claims 174, 209, 213, 217, and 219 under 35 U.S.C. 102(a) as being anticipated clearly by Rawls et al (ACS polymer preprints, 9/1997, p. 167-168, vol. 38(2)) has been maintained with the reasons of record on 6/7/05.

8. The rejection of Claim 174 under 35 U.S.C. 102(a) as being anticipated clearly by Bigg et al (Annual Tech. Conference –society of plastics engineers (2000), 58<sup>th</sup> (vol. 10, p. 1228-1231) has been maintained with the reasons of record on 6/7/05.

Art Unit: 1625

Applicants' attorney has addressed the issues of record, but not rebutted the claim rejections *174-191, 194-223, and 226-228* under 35 U.S.C. 112, second paragraph or under 35 U.S.C. 102 (a) or (b).

### The New Issue

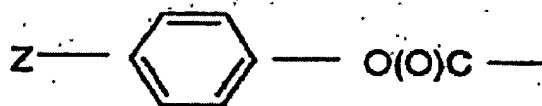
The proposed amendment will not be entered because the phrase "one or more members selected from the group consisting of X and Y consists essentially of a cinnamoyloxy group in claim 208 raises a new issue that would require further consideration and search in the claim.

### Applicants' Argument

Applicants argue the following issues:

a.

Claim 209 requires that "one or more members selected from the group consisting of X and Y ha[s] the following structure:



The examiner has not pointed out to the teaching of this element of claim 209 in any of references over which claim 209 is rejected, namely: Meyer, Wellinghoff, (WO 98/13008), Wellinghoff (J. Den. Res. 1997, 0. 279 (abstract 2127), vol. 76); Norling, or Rawls.

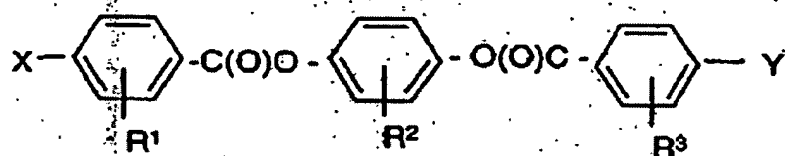
Art Unit: 1625

Applicants' arguments have been noted, but the arguments are not persuasive.

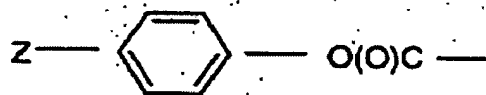
First, regarding the first argument, the Examiner has noted applicant's argument.

However, claim 209 recites the following limitation :

209. (Currently amended) Mesogens having the following formula:

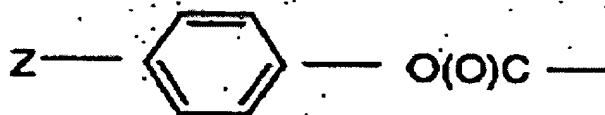


wherein X and Y independently are selected from the group consisting of spacer groups, polymerizable groups, and combinations thereof, one or more ~~member~~members selected from the group consisting of X and Y having the following structure:



wherein Z is selected from the group consisting of spacer groups, terminal functionalities, polymerizable groups, and combinations thereof, said spacer

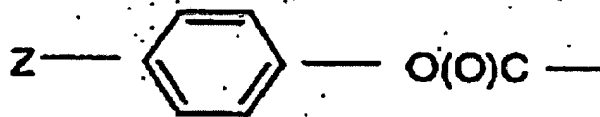
From this limitation, it does show that X and Y independently can be spacer groups, polymerizable groups, and combinations thereof, and one or more members selected from the group consisting of X and Y



having the following structure:



Art Unit: 1625



Unlike applicants' argument, this element,

, is not the required limitation or the proviso statement for claim 209, but the element is considered as the specific component of combinations thereof. Therefore, the prior art are still relevant to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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1/25/06

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